DETERMINANTS OF ACCESS TO PUBLIC PROCUREMENT OPPORTUNITIES AMONG PEOPLE WITH DISABILITIES SUPPLIERS IN COUNTY GOVERNMENT IN KENYA: A CASE STUDY OF NAIROBI COUNTY

Nicellah Wairimu Mwai¹, Dr Anaya W. Senelwa²
Jomo Kenyatta University of Agriculture and Technology P. O Box 62000-00200 Nairobi, Kenya

Abstract: Government procurement offers an exceptional and matchless route that is fast and direct to empower women, youth and the disabled and combat poverty. However, all over the world, challenges facing public procurement are less inclusion due to low number of people with disabilities (PWDs) accessing government procurement opportunities. In spite of the legal, policy and institutional reforms undertaken so far in the public procurement sector in Kenya, people with disabilities suppliers still find it hard to effectively access procurement opportunities in public sector in Kenya.

Thus, the general objectives of the study were to investigate determinants of access to public procurement opportunities among PWDs suppliers in Nairobi County. The study specifically, determines influence of financial resources, information technology, training and procurement experience on access to public procurement opportunities among PWDs suppliers. The study is guided by Social – Economic Theory and Resource – Based View Theory. The study used a descriptive research design. The target population were 140 PWDs supplier located in Nairobi County (registrar of Company, AGPO). Simple random sampling was used to obtain a sample population of 103. Data for the study was collected through administering questionnaires. The results indicated that financial resources, information technology, training and procurement experience had significant effect on access to PPO for PWDs. Therefore, there is need for firms with PWDs to have high financial linkages to make it easier for them to access funds for conducting procurement business. Also, training of PWDs in ICT proficiency is necessary so as to enhance their access to public procurement opportunities. Finally, PWDs need to be sensitized on how to search for tenders and prepare government procurement documents.

Keywords: Public Procurement Opportunities, PWD, Disabilities Suppliers.

1. INTRODUCTION

Background of the Study

The public procurement is a vital component of a country’s public administration that links the financial system with economic and social outcomes (Schapper & Veiga Malta, 2011). It is seen as an objective and efficient way of contracting between the state and private entities (Schooner, 2012) and is widely used to promote socio-economic development objectives of a nation, such as the economic development of disadvantaged social groups (Arrowsmith, 2010). The state of government procurement greatly determines the governance and performance of community services and cuts across...
almost every area of planning, program management, and budgeting. It is therefore, an important market in any economy as it consumes a substantial percentage of public revenue of a country (Schapper & Veiga Malta, 2011).

Government procurement offers an exceptional and matchless route that is fast and direct to empower women, youth and the disabled and combat poverty. Public procurement accounts for over 30% of GDP in developing countries and some 10-15% of GDP in developed countries. (United Nations Development Program, 2014). Marginal groups economic empowerment is a critical element for the business community and policymakers (Thevenon, Allart & Hovart, 2012). Hence, promoting equality of public procurement opportunity for and inclusion of people with disabilities is central to social and economic development, emergence from the global financial and economic crisis and achievement of the Millennium Development Goal. ILO (2017) report calls for support governments, social partners, and disabled peoples organizations to develop effective policies and programs to increase the procurement women and men with disabilities. However, all over the world, challenges facing public procurement are always attracting attention from civil society, donors, politicians, practitioners, academicians and researchers due to low number of people with disabilities (PWDs) accessing government procurement opportunities ((Tibben & Astbrink 2012). Hence, this study attempted to find reasons why most of people with disabilities are not able to access government procurement opportunities.

1.1.1 Global Perspective on Access to Public Procurement Opportunities among PWDs Suppliers

Around the world, approximately one billion people or 15 per cent of the population have a disability (UN, 2013). Estimates indicate that disabled persons experience low rates of accessibility of public procurement opportunities as low as 10 per cent in some low-income countries, while rates in some OECD countries is at 30 per cent (World Bank, 2015). Despite social stigma and exclusionary practices, people with disabilities have become increasingly proactive in asserting strength and confidence in their own abilities to access public procurement opportunities.

For the past two decades, considerable scholarly and applied research has been produced describing the barriers to competitive public procurement opportunities faced by people with disabilities, as well as information on successful evidence-based practices at the state and local level in helping them obtain public procurement opportunities. Despite substantial research, demonstration projects, multiple government efforts, and compelling reasons for giving public procurement opportunities to PWDs of access to public procurement opportunities remain unacceptably low (U.S. Bureau of Labor Statistics, 2013).

This is realized through the establishment of government-wide and federal agency-specific goals for the percentage of contracts and/or subcontracts awarded to small businesses, through procurements in which only small socially disadvantaged, known as a “set-aside,” and/or through sole-source awards to small-owned or firms with certain certified classifications, or in some instances a price evaluation preference (Manuel & Lunder, 2013).

Public procurement policies that enable partnerships with cooperatives of disabled persons have also proven an effective means for balancing support measures and self-determination of persons with disabilities (UN, 2014). Some examples include cooperatives of disabled persons in the Philippines manufacturing school furniture, cooperatives of disabled people managing public sanitation services in Malaysia as part of an outsourcing arrangement with the municipal government and Italian social cooperatives providing building and ground maintenance services to the State (National Federation of Cooperatives of Persons with Disability, 2011).

In Germany, increasing the availability of accessible ICTs is considered a positive step in removing barriers that prevent people with disabilities from participating equitably in society (Hawkins 2011; Waddell 2009) and thus increasing digital inclusion. Government purchasing, usually called public procurement, refers to the processes that governments engage in to purchase goods and services, mainly from the private sector, to enable them to carry out various functions (McCrudden, 2013). The primary aim for including accessibility criteria in ICT public procurement is to provide more equitable access to ICT office equipment such as phones and computer systems for public servants with disabilities. However, it can have flow-on effects for increased ICT accessibility to the broader community.

The use of public procurement to shape social outcomes is not new (McCrudden 2017). Recent developments in the European Union (EU) indicate that the use of public procurement to further social goals is still very much on the agenda there (EU 2010). However, the use of public procurement to singularly create additional demand for accessible ICTs is relatively recent (Waddell 2009) and untested in the Australian context.
1.1.2 Local Perspective on Access to Public Procurement Opportunities among PWDs Suppliers

Public procurement has a huge impact on the economy of Kenya. For instance, independent procurement review Kenya (IPRK, 2005) established that in the period between the years 2003 to the year 2004, the value of government procurement in Kenya has been growing in leaps and bounds. With constant growth of the GDP, the amount expended in government procurement continues to rise and in the year 2014, it is estimated to be about 30% of the Ksh. 1.6 trillion Kenyan National budget (Hansard, 2014) This huge amount if well managed could drive economic growth and could also, according to OECD (2006), spur entrepreneurship among the largely unemployed PWDs in developing nations through their access in public procurement.

Thus, under the ministry, the public procurement in Kenya has been undergoing reforms starting with the public procurement and disposal act, 2005 that saw the creation of public procurement oversight authority and later on the Public Procurement Assets Disposal Act 2015 (PPDA, 2013). In improving public procurement in Kenya as well as reform initiatives have centered on making the acquisition process more efficient, essentially by blocking legal and procedural loopholes believed to be avenues for barring PWDs from accessing procurement opportunities (Mugo, 2010). The government has come up with an initiative to support persons with disabilities through AGPO to assist them get 30% of procurement and equivalent open doors for individuals with disabilities through AGPO to assist them get 30% of procurement and equivalent open doors for individuals with disabilities.

Applying the WHO recommended 10 per cent to today’s Kenyan population of approximately 36 million1 would indicate that there may be some 3 million disabled people. Many disabled people in Kenya, as in most developing countries in the world, live in poverty, have limited opportunities for accessing public procurement opportunities (WHO, 2012). Regardless of this, Kenya has various laws and strategies supporting people with disabilities. These incorporate the Persons with Disabilities Act (2003), which passes on rights, restoration and equivalent open doors for individuals with incapacities. These efforts remain valid and justified especially considering the general legislative and regulatory weakness that has characterized procurement in Kenya's public sector over the last four or so decades and the current levels of unemployment among the youth, women and PWDs.

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1.2 Statement of the problem

In Kenya, according to Transparency international (2013), special groups (women, youth and people living with disabilities) constitute of over 85% of the entire population yet they contribute to less than 10% of public procurement involvement thus these hampers economic growth and achievement of vision 2030. Special groups have cited many of their problems to included capacity building, lack of access to credit, inadequate skills, poor information and inhibitive legal regulatory framework (Brinkerhoff, 2014).

In spite of the legal, policy and institutional reforms undertaken so far in the public procurement sector in Kenya, people with disabilities suppliers still find it hard to effectively access procurement opportunities in public sector in Kenya. Locally, there are Studies conducted accessibility public procurement opportunities in general. For instance, Gitari and Kabare (2014) analyzed the factors affecting access to procurement opportunities in public secondary schools by small and medium enterprises in Kenya. However, he did not address the factors affecting the Youth, women & persons with disabilities involvement in public procurement. Gatare and Shale (2014) investigated the challenges affecting the implementation of access to government procurement opportunities for Youth, women & persons with disabilities in Kenya: A case of Nairobi County. They did not consider the challenges that persons with disabilities face in the process of accessing procurement opportunities which needs to be investigated. Researchers such as Kamau et al. (2014), Wambui (2014), Muraguri (2013) and Muthoni (2012) have dwelt on youths a lot leaving out women and PWDs on accessing government procurement opportunities. Nevertheless, local studies have ignored people with disabilities suppliers’ opinion on what factors affect them in accessing public procurement opportunities especially in county governments. Previous studies have only focused in investigate factors of access to public procurement opportunities for youth and only collect opinions from government employees but not from them special group such as PWDs. Thus, this study intended to fill the gap by investigating determinants of access to public procurement opportunities among people with disabilities suppliers in Nairobi County.
1.3. General objectives
The general objectives of the study was to investigate determinants of access to public procurement opportunities among people with disabilities suppliers in Nairobi County

1.3.1 Specific objectives
The study was guided by the following objectives
1) To determine influence of financial resources on access to public procurement opportunities among PWDs suppliers in Nairobi County
2) To assess effect of information technology on access to public procurement opportunities among PWDs suppliers in Nairobi County
3) To assess effect of training on access to public procurement opportunities among PWDs suppliers in Nairobi County
4) To determine effect of procurement experience on access to public procurement opportunities among PWDs suppliers in Nairobi County

1.4 Research Questions
The study sought to answer the following research questions;
1) What is the influence of financial resources on access to public procurement opportunities among PWDs suppliers in Nairobi County?
2) How does information technology affect access to public procurement opportunities among PWDs suppliers in Nairobi County?
3) Does training affect access to public procurement opportunities among PWDs suppliers in Nairobi County?
4) What is the effect of procurement experience on access to public procurement opportunities among PWDs suppliers in Nairobi County?

2. LITERATURE REVIEW

Theoretical Review
Several theories have been compounded to show the effect of determinants of access to public procurement opportunities among people with disabilities suppliers. The study will therefore be guided by four theories namely; The Social – Economic Theory, Institutional Theory and information theory are the main theory used in this study, as the theoretical framework

2.2.1 Social – Economic Theory
The social-economic theory was propounded by Sutinen and Kuperan (1999). The socio-economic theory of compliance was formulated by integrating economic theory with theories from psychology and sociology to account for moral obligation and social influence as causes of individuals” decisions on adherence to the set standards. The emotional perspectives provide a foundation for the success or failure of organizational compliance (Lisa, 2010). According to Hui et al., (2011) this theory concentrates on the association and interaction between an entity and the society, provides a sufficient and superior lens for understanding public procurement system. The rules and regulations established by the government to guide procurement procedures and conduct of procurement professionals acts an antecedent for individuals to comply to the standards established. In Kenya this is guided by the PPDA (2005), its regulations and amendments and regulations provided by the government. The implementation of 30% of procurement opportunities to youth, women & persons with disabilities is guided by 2013 regulations that all public entities should comply. This theory is relevant in discussing procurement training on access to public procurement among PWDs

2.2.2 Upper Echelons Theory
The upper echelons theory states that ‘organizational outcomes, strategic choices and performance levels are partly projected by managerial background characteristics’ (Hambrick and Mason, 1984). Directors’ experience, values and characteristics have an impact on their perceptions and hence their decisions; this is the main premise of the upper echelons theory (Hambrick, 2007). Drawing on the upper echelons theory, it can be argued that the board, amongst other decision makers is characterized by bounded rationality. This means that supplier decisions based on their social,
behavioral and psychological characteristics (Hambrick and Mason, 1984; Bernile, 2016; Tarus and Aime, 2014). Tarus and Aime (2014) and (Farag and Mallin, 2016) argue that PWDs: age, tenure, education, financial background and gender might be used as a proxy for their psychological, social and cognitive characteristics. A number of studies have drawn on the upper echelons theory to explain the PWDs experience in relation to strategic change (Tarus and Aime, 2014); corporate policies (Bernile et al., 2016) and managerial decisions (Cheikh, 2014) for instance, risk taking. The theory is important in experience PWDs procurement experience and how that affect access to public procurement opportunities.

2.2.3 Resource – Based View Theory

Theory RBV is an economic theory that suggests that firm performance is a function of the types of resources and capabilities controlled by firms (Barney and Hesterly, 2008). A resource is a relatively observable, tradable asset that contributes to a firm’s market position by improving customer value or lowering cost (or both); and a capability denotes the ability of a firm to accomplish tasks that are linked to higher economic performance by increasing value, decreasing cost, or both. (Walker, 2004). Barney and Hesterly (2008) also describe resources as tangible and intangible assets a firm uses to conceive of and implement its strategies; and capabilities as a subset of resources that enable a firm to take advantage of its other resources. Eisenhardt & Martin (2000) argues that availability of substitute resources tends to depress returns of the holders of a given resource and this justifies the reason why they should be shielded from competitors. By conducting an effective value chain analysis, an organization is able to identify these scarce resources that give it competitive advantage and apply appropriate mechanisms to protect the resources from competitors. In relation to this study, the theory relates with the specific objective to establish the influence of financial resources on youth access to government procurement opportunities in the judiciary of Kenya under the framework that public procurement is anchored on a competitive bidding process, embracing transparency and efficiency in the system. The theory is relevant to the study by explaining how finance and information as resource affect access to public procurement opportunities.

- Conceptual Framework

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<thead>
<tr>
<th>Independent Variables</th>
<th>Dependent variable</th>
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<td>Financial resources</td>
<td>Access to public procurement opportunities</td>
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<td>• Adequate finance</td>
<td>• No of tender prequalification</td>
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<td>• Access to credit</td>
<td>• No of tender application</td>
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<td>• Access to government funds for disadvantage groups</td>
<td>• Frequency of supplying to government entities</td>
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<td>Information technology</td>
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<td>• Access to internet</td>
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<td>Training</td>
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Figure 1: Conceptual Framework
2.4 Empirical Review

2.4.1 Financial Resources and Access to Government Procurement Opportunity

The role of finance has been viewed as a critical element for the development of small and medium-sized enterprises (Namusonge, 2006). Smaller enterprises face higher transaction costs than larger enterprises in obtaining credit (Kimando & Sagwa, 2012). Improving access and building inclusive financial systems is a goal that is relevant to economies at all levels of development. According to Kimando & Sagwa (2012), the Micro and Small Enterprise (MSE) sector has been estimated to account for 20% of the total output and over 20% of the total labour force 12 in Africa. These small enterprises have enormous potential to create these much-needed employment opportunities for a country’s youth population. The challenge of better access means making financial services available to all, thereby spreading equality of opportunity and tapping the full potential in an economy (Mwangi & Wanjau, 2012). Encouraging entrepreneurship as well as providing sources of sustainable and inclusive access to finance is a crucial ingredient towards achieving this goal (Oduol, et al, 2013).

Empirical research suggests that access to finance enhance the performance of firms in terms of income and employment generation (Kilonzo, 2012). It has also been established that individuals with large stocks of financial capital are most likely to start and grow new enterprises (Kimando & Sagwa, 2012). This set of research findings is usually connected to the theory of liquidity constraints. The general implication of this theory is that people with financial capital are able to acquire resources that better help them exploit entrepreneurial opportunities (Mwangi & Wanjau, 2012). Therefore, provision of financial capital may be an important predictor of the performance of youth owned enterprises (Kilonzo, 2012).

Okwany (2010) identified access to finance as one of the primary challenges youth face in trying to increase their employability or expand their business since they have been termed as risky in terms of loan repayments. Youth often obtain access to finance through a variety of informal sources, such as family, friends, selling labour, and informal money lenders.

According to Chigunta (2002), young entrepreneurs face key constraints and challenges in accessing funding for their business ventures. These include lack of personal savings and resources, lack of securities and credibility (for debt financing), lack of business experience and skills (for debt financing), strict credit-scoring methodologies and regulations, complex documentation procedures, long waiting periods (time needed to decide on an application for funding), lack of knowledge, understanding, awareness of start-up financing possibilities, unfavourable firm characteristics and industry and legal status/form of enterprise. Securing start-up finance is also often highlighted as being particularly difficult for young people to achieve due to their relatively lower securities, e.g. adequate credit history, collateral or guarantees, as well as lack of credibility as a result of limited experience compared to ‘older’ entrepreneurs (World Bank, 2008).

The development of small and medium enterprises (Suppliers) run by specialized groups is very important to the national economy. Procurement can be an important source of business for Suppliers (Charles & Omwenga, 2018). However, access to public sector contract s by smaller entities is often seen as a problem, at national and global level, for many in the sector. While sustaining development impacts is key, it is the majority at grassroots that accelerate and sustain poverty reduction efforts (Ramsay, et.al, 2008), hence the need to target the rural poor to achieve overall economic growth by funding them to be able to access public procurement.

Snider, (2006) argues that the high proportion of women in the poverty group in the third world makes efforts at development fruitless. This is because the investment threshold for the third world has pushed far above the current levels of funding to a point where local level development is the only feasible alternative solution (Gomez, 2009) development efforts that centre on sustainability must target the grassroots majority. The Kenyan government has had an uphill task for youth and women groups to play in the big-ticket leagues of public procurement as they may not have the financial wherewithal (Charles & Omwenga, 2018). Fortunately, there are a host of financial instruments being offered by various institutions, including local purchase order (LPO) financing and invoice discounting. There is also the Uwezo Fund and the youth and women enterprise fund, yet processing an invoice cantake months. “The best thing about getting a government contract is that you will get paid. The downside is it could take a while (Polo, 2008).”

A study by McCrudden (2007) determine the preference of minority in the enterprises to secure 10% of the public works in USA as the Public Works Act 1977 provided that at least 10% of each grant for local works project be expended for
minority business enterprise. This came to be known in the United States as Set Asides. In Malaysia, in order to uplift the entrepreneurial capacity of the local Malays (called the Bumiputera), all supplies contracts with value between RM10, 000-RM100, 000 (ksh 260,000-2,600,000) and work contracts up to RM100, 000 (Ksh 2,600,000) were reserved to them.

Nduta, Ayuma, Langat, and Yego (2015), carried out a study on the factors affecting youth participation in public procurement. The independent variable of analysis was opportunity awareness, finance availability, regulatory requirements and patronage perception whereas youth participation was the dependent variable. The researcher used descriptive and inferential statistics. A population of 345 youth owned enterprises operating within Mombasa County were used with a sample size of 135 enterprises. The study adopted stratified and systematic random sampling as well as snowballing data collection techniques. The study revealed that Pearson’s correlation between the youth Participation with awareness and Finances was .600 and .510 respectively. Whereas Patronage perception and regulatory requirements had a negative correlation of -.445 and -.260 respectively with the Dependent Variable. Multiple linear regressions was used to analyze the relations between the variables at a 0.05 significance level. This study however failed to determine factor affecting compliance with AGPO regulations for special groups in public universities.

2.4.2 Information Technology and Access to Government Procurement Opportunity

Most public procurement systems address in one way or another issue of how to provide information support for the domestic supplier base (Lavassani, et.al. 2008). Improved information techniques mostly through the internet for buying goods and services using modern quality standards and business practices in the government can help improve the efficiency of special group’s suppliers as they compete for government contracts with big players. Such improvements in information access can enhance trade prospects by making these suppliers more acceptable vendors to global business partners (Murray,.2007),. Information and communication technology has been increasingly used by governments in the acquisition of goods and services, the allocation of contracts to bidders and in contract management. The benefits of information and communication technology are many and include improvements in market access and competition, promotion of integrity, reduced information costs; easier access to information, and increased transparency and accountability, among others. In this context, information availability also has the capacity to prevent and reduce the opportunities for corruption in the different stages of public procurement.

Osman (2015) agrees that ICT performs an important function in the lives of persons with disabilities. However, they encounter a number of challenges in accessing CT services. Therefore, ICT is regarded as a successful mediator in empowering some of the marginalized communities and individuals in Kenya. Concerning empowering of disabled persons in employment, the research presumes that ICT is instrumental in this respect. Since ICT proficiency is now among the most fundamental skills to compete in the business environment, training of disabled individuals in this field is required as soon as possible.

Lagat, Namusonge and Berut, (2016) carried a study to determine the factors affecting youth, women & persons with disabilities on accessing procurement opportunities in Transnzoia County Government. The objectives of the study were to determine the effect of availability financial resources by youth, women and persons with disabilities on accessing procurement opportunities in Transnzoia county government, to establish the effect of procurement procedures on youth, women and persons with disabilities in accessing procurement opportunities in Transnzoia county government and to ascertain the effects of enforcement and compliance on youth, women and persons with disabilities in accessing procurement opportunities in Transnzoia county government. The study adopted descriptive research design with target population of the twenty (20) Procurement Practitioners working under supply chain department and one hundred and twenty five (125) youth, women & persons with disabilities’ enterprises in Transnzoia County Government. A questionnaire was the primary source of collection of data from the respondents. The study employed descriptive analysis to determine the factors and factor analysis was used to identify the underlying factors. By identifying the factors affecting youth, women and persons with disabilities in accessing procurement opportunities in Transnzoia County Government. The study revealed that availability of financial resources, procurement procedures and enforcement and compliance contributes to accessing procurement opportunities in Transnzoia County Government. This study failed to determine determinants of compliance with AGPO for special groups in public entities motivating the carrying of the present study.

2.4.3 Training and Access to Government Procurement Opportunity

Research Publish Journals
According to Gakure (2001), training is a learning activity, which is directed towards acquisition of specific knowledge & skills for the purpose of an occupation. It focuses on the job task. The training can be both formal and informal and is usually carried out to assist a person understand and perform his/her job better. Today’s business environment can be characterized as changing. The accelerated pace of advances in technology, increasing foreign competition, widespread and growing unemployment creating serious adjustment problems, and diminishing resource supplies have affected the way business is conducted. This complex and unstable environment is a way of life, which will continue far into the future (Buckley, 1993).

Rasmussen & Sørheim (2006) argue that entrepreneurship training has traditionally focused on teaching individuals, but many initiatives are increasingly becoming more action-oriented, emphasizing learning by doing. In their paper they present a number of action-based activities at five Swedish universities. The cases show that entrepreneurship education focuses less on teaching individuals in a classroom setting and more on learning-by-doing activities in a group setting and network context. Given that past research results have consistently found SME training to result in better company performance, even under different cultural settings such as the Netherlands, Spain, Hungary, and China (Mullei, 1999), it is expected that implementation of AGPO-related training programs will lead to higher firm performance in Youth Suppliers. This statement underpins the importance of training and development in the national economic development process. It becomes significant point of reference especially since most developing countries are responding to many challenges of the industrial development by implementing new programs, which calls for new expertise and new orientation of work. This usually means changes in specific knowledge, skills, attitudes or behaviours. Training should be designed to meet the goals of the organization while simultaneously meeting the goals of individual employees (Gakure, 2001).

Public procurement policy makers recognize the importance of the role of Suppliers in the economy, including the importance of their participation in the public procurement market (McCrudden, 2005). Public procurement can help in the development of an effective and efficient SME sector by providing appropriate opportunities for Suppliers which are mostly run by special groups to demonstrate their skills and capabilities, including the purchase of goods and services which allows Suppliers to develop and demonstrate innovative goods and services (Charles & Omwenga, 2018). In the past, procurement was considered mainly as an operational activity rather than as a key strategic function in the business planning process. Public purchasers concentrated on compliance with rules and procedures set down in guidelines, regulations or EU Directives to seek value for money outcomes from procurement while observing necessary standards of probity and ethics (Thai et al, 2009). Further, Jamii Bora in Kenya is offer training to the special groups on how to bid for government contracts.

The Republic of Uganda (ROU, 2011), conducted a survey on SME access to the procurement market with a view of establishing the challenges faced. The survey deduced that Suppliers were not faring well in the procurement market. Whilst there was clearly a proportion of Suppliers which are both able to effectively tender for work and rely heavily on these types of contracts; there was also a much larger proportion of Suppliers which are unable to successfully participate. The reasons most cited included insufficient knowledge therefore being rated poorly on technical capacity by buyers. From the survey, most public entities cited that working with Suppliers is frustrating with a considerable portion having been awarded contracts and not delivered. Obanda, (2011) analyzed the strategic and management interventions that can enable youth Suppliers in Uganda obtain public procurement contracts to maximize sustainability in the context of inclusive growth. The study established that the challenge Suppliers face in accessing public contracts also depends on how they themselves increase their capacity to fulfill government contracts. The study recommended among other things that governments in developing economies should play a significant role in eliminating the supply side constraints. Waltermeyer (2003) study of preferential procurement systems particularly in South Africa established that among other factors affecting the success of these policies is the inherent level of education and skill among the target groups of these systems. Thus, these groups may not benefit from such preferential procurement systems.

### 2.4.4 Procurement experience and Access to Government Procurement Opportunity

The nature of prior experience, specifically perception of an experience as a ‘failure’ or a ‘success’, can shape subsequent attitudes and behavior (Shepherd, 2003). Experience with business failure can be associated with cognitive/functional effects (Ucbasaran et al., 2009). Studies suggest that people are less likely to report comparative optimism after a negative event experience. As experienced managers are likely to have better insights into future business opportunities, threats,
nich market (Shane, 2000), products, technologies or market development (Helfat & Liebermann, 2002), managerial experience is expected to be positively related to innovative activity and its performance. In this study we argue that the positive effect of managerial experience on innovative firm activities is presumably more pronounced in countries with less developed institutions as firms operating in such environments have to rely relatively more on informal agreements, personal reputation and knowledge on how to deal with external institutional shortfalls.

Experiences of managers are part of their human capital and comprise technological, commercial, organizational and managerial skills and knowledge that managers accumulate during their careers (Weterings & Koster, 2007). Such capabilities may serve as an important input factor of a firm. As intellectual assets are not easily imitable by rivals, they presumably result in a competitive advantage of firms possessing them. Knowledge about how to profitably innovate typically requires a good understanding of relevant technologies and evolving markets. As new developments and technologies within an industry often follow a path-dependent pattern, knowledge about past industry conditions enhance managers’ capability to understand current and predict future industry dynamics (Arthur, 1994, Kor & Sundaramurthy, 2009). Hence, industry-specific experience of the top-manager might be crucial for the success of corporate innovative activities. This perception is, among others, supported by Klepper & Simons (2000) who reveal positive effects of experience in the radio industry for successfully entering the TV receiver market. Furthermore, the literature on startups also suggests that industry-specific experiences are particular valuable to improve the firm performance of newly founded firms (Garvin, 1983, Klepper, 2001, Agarwal et al., 2004, Dahl & Reichstein, 2007, Filatotchev et al., 2009). Likewise does the industry specific experience of board members, who advise and monitor top executives, help young, listed firms to grow faster (Kor, 2009).

Ngeno, Namusonge and Nteere (2014) investigated the effects of discriminatory public procurement practices on organizational performance in public sector. This study sought to evaluate the effect of reservation practices on the performance of State Corporations in Kenya. The study was guided by the following objectives; to determine the effect of preferencing practices on the performance of State Corporations in Kenya; ascertain the effect of indirect practices on the performance of State Corporations in Kenya and; assess the effect of supply side practices on the performance of State Corporations in Kenya. This study adopted a mixed research design and a target population of 139 procurement managers sampled through a simple random sampling. Data analysis methods a multiple linear regression model was applied to examine the relationship between the variables. The model treated organizational performance as the dependent variable while the independent variables were discriminatory public procurement practices including; reservations, preferences, indirect practices and supply side practices. The findings of the study showed that a combination of preservation practices and preferencing practices explained 75.7% of variations in State Corporations performance. The study concluded that reservations, preferences and indirect practices, positively influenced the performance of State Corporations in Kenya. This study however failed to indicate the extent to which preservation practices and preferencing practices determine compliance with AGPO for special groups in public sector organizations and more specifically public universities in Kenya.

2.5 Critique of Existing Literature

From the review of the past studies, Empirical studies such as Ngai, Drew, Lo & Skitmore, 2002) Jaafar, Ramli and Aziz (2014) revealed that perceived discrimination for PWDs of the procurement policies. Researchers such as Kamau et al. (2014), Wambui (2014), Muraguri (2013) and Muthoni (2012) have dwelt on youths a lot leaving out women and PWDs on accessing government procurement opportunities. As per the regulations of 2013 for preference and reservation, 30% of procurement opportunities are reserved for all Youth, women & persons with disabilities that is youths, women and PWDs and not only youths. The reason for the Kenyan Government to come up with AGPO programme was to involve all Youth, women & persons with disabilities in public procurement opportunities as a whole. Hence this gap has to be field by evaluating all the Youth, women & persons with disabilities without favor or discrimination of one group.

2.6 Research Gap

Local studies focus on determining challenges faced by PWDs in procurement regulations in organizations. For instance, Badaso (2014) and Okioga, Otieno and Mongare (2012) who revealed that here were challenges facing secondary schools in implementing the procurement Act. 59 Compliance, however little is known on determinants of compliance with AGPO regulations which has been affecting efficiency and effectiveness in public procurement. Based on the literature reviewed, it is evident that there are inadequate studies on the factors affecting PWDs participation in public procurement.
in Kenya and specifically there are no related studies pertaining to PWDs supplier perspective Publications County Government in relation to the topic. Studies conducted have focused more youths and to some extent women leaving out PWDs and public procurement opportunities in general. Gitari and Kabare (2014) analyzed the factors affecting access to procurement opportunities in public secondary schools by small and medium enterprises in Kenya. However, he did not address the factors affecting the persons with disabilities involvement in public procurement. Gatare and Shale (2014) investigated the challenges affecting the implementation of access to government procurement opportunities for Youth, women & persons with disabilities in Kenya: A case of Nairobi County. They did not consider the challenges that persons with disabilities face in the process of accessing procurement opportunities which needs to be investigated. This study focus on filling the existing research gaps by assessing determinants of access to public procurement opportunities among PWDs supplier in Nairobi Country.

3. RESEARCH METHODOLOGY

3.1 Research Design

The study used a descriptive research design to help in indicating trends in attitudes and behaviors and enable generalization of the findings of the research study to be done. Descriptive survey design is a method that involves the analysis of data collected from a population sample, or a representative subset, at one specific point in time (Orodho, 2003).

3.2 Target population

The target population defines those units for which the findings of the study are meant to generalize (Gall & Borg, 2007). In this case, this study targeted 140 PWDs supplier located in Nairobi County (registrar of Company, (AGPO, 2018).

<table>
<thead>
<tr>
<th>Total Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Embakasi West Sub County</td>
</tr>
<tr>
<td>Kasarani Sub County</td>
</tr>
<tr>
<td>Langata Sub County</td>
</tr>
<tr>
<td>Roysambu Sub County</td>
</tr>
<tr>
<td>Starehe Sub County</td>
</tr>
<tr>
<td>Embakasi Central Sub Count</td>
</tr>
<tr>
<td>Embakasi South Sub County</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

Source; AGPO (2018).

3.3 Sample size and Sampling Technique

Mugenda and Mugenda (2003) recommend 10%-50% of the target population for large and small numbers respectively. In this study Simple random sampling was used to obtain a sample population from a target population of 140 PWDs supplier located in Nairobi County.

\[ n = \frac{N}{1+Ne^2} \]

\[ n = \text{sample size} \]

\[ N = \text{target population (140)} \]

\[ e = \text{margin error of 10%} \]

\[ n = \frac{140}{1 + 140(0.05)^2} = 103 \]

3.4 Data Collection Instruments

Data collection is a means by which information is obtained from selected subjects of an investigation (Creswell, 2003). The instruments of data collection are tools used to collect both primary and secondary data. Suitable, usable and adequate data for the study were collected through administering questionnaires. Questionnaire is a tool for data collection
in which respondents provide written answers to written questions (Gilham, 2008). According to Cooper and Schindler (2006) the questionnaire is conveniently used because it is cheaper and quick to administer, it is the above researcher’s effect and variability, and is highly convenient for the respondents as they could fill them during free times or when workloads are manageable.

3.5 Data Collection Procedure

The questionnaires were delivered to the PWDs suppliers to be filled by respondents at their own convenient time. Most questions and statements in the questionnaires were close-ended design i.e. expecting standard responses that could be analyzed statistically. For example, Likert scales representing a spectrum of feelings and opinions with (1) implying strong disagreement and (5) proxying strong agreement were included in the questionnaire to collect ordinal data. The secondary data was obtained from the documented files in the departments of finance, production, procurement departments and even the university online repository.

3.6 Validity of the Research Instrument

Validity is concerned with establishing whether the questionnaire content is measuring what it is supposed to measure (Orodho, 2005). Similarly, Jankowicz (2005) argued that validity is ensuring that a test measures what it is supposed to measure. The content validity of the research instruments was ensured through expert judgment provided by my supervisor. Gall et al. (2004) points out that content experts help bring out content validity by defining in precise and detailed terms the domain of the specific content that the test is assumed to represent and then determines how well that content universe is sampled by test.

3.7 Reliability of the Research Instrument

Reliability is the measure of the degree to which a research instrument yields consistent results or data after repeated trials (Mugenda & Mugenda, 2003). To ensure reliability of the instrument, the researcher analyzed the data collected from the pilot study by use of the SPSS software where the results from pilot study were carefully studied to assess the reliability of the instrument. The pilot study involved administering the same questionnaire to the same respondents twice. In this case, the questionnaire administration had an interval of one week. According to Jankowicz (2005), reliability is the degree to which a test yields the same results on repeated trials. Reliability of the instruments was tested during piloting. Gall et al. (2004) observed that piloting is important as it helps identify misunderstandings, ambiguities and useless or inadequate items. The number of respondents in the pilot study were 10 (10% of 92). This is in line with the rule of the thumb that stipulates that 10 percent of the sample population can be used in pilot study (Neuman, 2006).

3.8 Data Analysis and Presentation

The study adopted both quantitative and qualitative approaches, implying that both descriptive statistics and inferential statistics were employed. Quantitative data collected from the document analysis were analyzed statistically using the Statistical Package for Social Scientist (SPSS version 24). All qualitative data gathered during the study was analyzed through content analysis and presented descriptively. Microsoft Excel 2008 was used to generate charts from the data analyzed by SPSS (version 24). The results of the study were presented in tables, graphs and pie charts. Inferential statistics refers to mathematical methods that employ probability theory for deducing (inferring) the properties of a population from the analysis of the properties of a data sample drawn from it. It is concerned also with the precision and reliability of the inferences it helps to draw. The study therefore conducted regression analysis to show relationship between variables.

The study tested the significance level of each independent variable against the dependent variable at 95% confidence level using ANOVA, Correlation and regression techniques. A 95% confidence interval reflects a significance level of 0.05, this shows that for an independent variable to have significance effect on the dependent variable, the p- value should be below the significance level of 0.05. This regression model was used to test the relationship between implementation of green procurement as a linear function of the independent variables. The βs in the equation represent the estimated parameters which represents the Beta coefficients of the respective independent variables as indicated below. The regression equation was expressed as:

\[ y = \beta_0 + \beta_1x_1 + \beta_2x_2 + \beta_3x_4 + \beta_4x_4 + \epsilon \]

Where,
\[ Y = \text{Access to Public Procurement Opportunities} \]

\[ \beta_0 = \text{constant (coefficient of intercept)} \]

\[ X_1 = \text{finance resource} \]

\[ X_2 = \text{information technology} \]

\[ X_3 = \text{training} \]

\[ X_4 = \text{procurement expertise} \]

\[ \varepsilon \] is Error term (random variation due to other unmeasured factors).

\[ \beta_1 \ldots \beta_4 = \text{regression coefficient of four variables.} \]
4. RESEARCH FINDINGS AND DISCUSSIONS

4.1 Response Rate

Response rate of survey is a significant concern in a study because it ensures the questionnaires collected are valid for data analysis (Hair et al., 2010). Out of the 103 questionnaires administered, 98 questionnaires were retrieved making a response rate of 95.15%. According to Sekaran & Uma (2013) response rate of 30% is acceptable for surveys and therefore response rate for this study is sufficient for further analysis.

4.2 Pilot Testing

4.2.1 Reliability Tests

In testing for reliability of the research instrument, the Cronbach alpha was used as a measure of internal consistency. As presented in Table 4.1 the Cronbach alpha values range between 0.747 to 0.945. According to Hair et al. (2010), values of above 0.6 are acceptable. From the findings on reliability, the level of reliability was sufficient thus the level of internal consistency was acceptable. Therefore, all items were included in the survey instrument. Report findings are shown in Table 4.2.1 below.

<table>
<thead>
<tr>
<th></th>
<th>Cronbach's Alpha</th>
<th>Cronbach's Alpha</th>
<th>Alpha</th>
<th>No. of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to PPO</td>
<td>0.911</td>
<td>0.915</td>
<td>0.91</td>
<td>5</td>
</tr>
<tr>
<td>Financial Resource</td>
<td>0.861</td>
<td>0.872</td>
<td>0.86</td>
<td>5</td>
</tr>
<tr>
<td>Information Technology</td>
<td>0.945</td>
<td>0.942</td>
<td>0.94</td>
<td>5</td>
</tr>
<tr>
<td>Training</td>
<td>0.821</td>
<td>0.823</td>
<td>0.82</td>
<td>5</td>
</tr>
<tr>
<td>Procurement experience</td>
<td>0.747</td>
<td>0.816</td>
<td>0.75</td>
<td>5</td>
</tr>
</tbody>
</table>

4.3 Descriptive Statistics

Descriptive analysis focuses on describing the basic features of data in a given study (Cooper & Schindler, 2013). In this section, descriptive analysis was used to summarize findings regarding Access to PPO, Financial Resource, Information Technology, Training and Procurement experience.

4.3.1 Financial resources

The availability of financial resources is key to the growth of a business and is likely to influence the access to public procurement opportunities. The study therefore sought to establish the influence of financial resources on access to public procurement opportunities among PWD suppliers in Nairobi County. Table 4.4 highlights the results. The respondents were asked whether they have adequate fund to conduct procurement business with the county. The results from the study revealed that, of the total respondents, 32.7% of the respondents strongly agreed that there are adequate funds to conduct procurement with the county, 57.1% agreed, 4.1% disagreed while 3.1% were neutral. Clearly, most of the firms have adequate fund to conduct procurement business with the county. The results are in tally with a mean of 4.12 and a standard deviation of 0.888.

In determining whether any amount of loan can be accessed from any financial institutions to conduct procurement business with the county, the study revealed that; 30.6% of the respondents strongly agreed, 53.1% agreed while only 3.1% disagreed and 13.3% were not sure. The results also showed a mean of 4.08 and standard deviation of 0.846. The implication is that, it is easier for the firms to access loans to conduct procurement business. It could be that the businesses have a good credit track record with financial institutions thereby making it easier for them to access loans.

In a related question of whether the firms have high financial linkages where they can access fund for conducting procurement business with the county, results from the study revealed that, the question had a mean of 4.32 and standard deviation of 0.959. The reason for this is that 56.1% of the respondents strongly agreed, 26.5% agreed while only 3.1% strongly disagreed and 13.3% were uncertain.
To find out if government loan can easily be accessed for PWD from institutions such as the Uwezo fund, respondents were asked to give their responses on the same. From the results, 25.5% of the respondents strongly agreed, 38.8% agreed, 12.2% disagreed while 23.5% were neutral. The item realized a mean of 3.78 and a standard deviation of 0.969. The results suggest that to some, access to government loan such as the Uwezo fund is a challenge.

Finally, 37.8% of the respondents agreed that the county provides special funding criteria for PWDs, 56.1% agreed while 2% disagreed and 2% were not sure. The results are supported by a mean of 4.26 and a standard deviation of 0.777. Evidently, the county provides special funding criteria for PWDs.

Financial resources had a cumulative mean of 4.093 and a standard deviation of 0.833 suggesting that most of the respondents agreed with the items on financial resources.

This finding is congruent to that of OECD (2007) who posited that lack of financial resources are considered as the major threats to youths to access public procurement opportunities.

<table>
<thead>
<tr>
<th>Table 4.5.1 Financial resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have adequate fund to conduct procurement business with the county</td>
</tr>
<tr>
<td>Freq.</td>
</tr>
<tr>
<td>%</td>
</tr>
<tr>
<td>I can access any amount of loan from any financial institutions to conduct procurement business with the county</td>
</tr>
<tr>
<td>%</td>
</tr>
<tr>
<td>I have high financial linkages where I can access fund for conducting procurement business with the county</td>
</tr>
<tr>
<td>%</td>
</tr>
<tr>
<td>I easily access government loan for PWDs from institutions such as Uwezo fund</td>
</tr>
<tr>
<td>%</td>
</tr>
<tr>
<td>The county provide special funding criteria for PWDs</td>
</tr>
<tr>
<td>%</td>
</tr>
<tr>
<td>Financial Resources</td>
</tr>
</tbody>
</table>

4.3.2 Information Technology

Information Technology is a driving force behind business growth as processes that were previously manual can be accomplished real time saving on time and costs. In light of this, the study sought to establish the effect of information technology on access to public procurement opportunities among PWDs suppliers in Nairobi County. Table 4.5 illustrates the findings.

To establish if the respondents can easily access computer for preparing tender documents, 22.4% of the respondents strongly agreed, 37.8% agreed, 5.1% strongly disagreed while 30.6% of the respondents were undecided. The item realized a mean of 3.68 and a standard deviation of 1.031 implying that to certain individuals, it is difficult to access computer for preparing tender documents.

The study further enquired from the respondents if they can access internet to check for county tenders posted online and on their website. The results revealed that 43.9% of the respondents strongly agreed, 27.6% of them agreed while 10.2% (10) disagreed and 16.3% (16) were neutral. The results suggest that the respondents have access to the internet thus they have access to tenders posted online and on their website. This is supported by a mean of 4.01 and a standard deviation of 1.098.

The respondents were also asked whether as part of the planning process the business units clearly indicated the timelines for using the required goods and services, the results indicated that, 58% agreed (6% strongly agreed), 9% were not sure while 33% disagreed. The results are supported by a mean of 3.81 and a standard deviation of 0.833.
Besides, the respondents were asked if they can be able to identify and prepare prequalification document online. The findings showed that 40.8% of the respondents strongly agreed that they can identify and prepare prequalification documents online, 35.7% of them agreed, 7.1% disagreed while 16.3% of the respondents were undecided. The item realized a mean of 4.1 and a standard deviation of 0.925 suggesting that the respondents are capable of identifying and preparing prequalification documents online. Finally, 58.2% of the respondents agreed that the county use of e-procurement have assisted PWD to easily access government procurement opportunities without moving, 14.3% strongly agreed while 24.5% of them were undecided. The item realized a mean of 3.82 and a standard deviation of 0.765. The results suggest that e-procurement has made it possible for PWDs to easily access government procurement opportunities without moving.

Generally, the findings on information technology summed up to a mean of 3.84 and a standard deviation of 0.774. The implication is that the respondents were agreeable on most items on information technology.

However, these findings are similar with what was done by Sumba and Gakuu (2015) on influence of the implementation of access to Government procurement opportunities programme on business growth in youth owned enterprises in Murang’a south sub county, Kenya that provision of information on government procurement opportunities influenced their businesses.

<table>
<thead>
<tr>
<th></th>
<th>Freq.</th>
<th>%</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can easily access computer for preparing tender documents</td>
<td>5</td>
<td>5.1</td>
<td>4</td>
<td>30</td>
<td>37</td>
<td>22</td>
<td>3.68</td>
<td>1.031</td>
</tr>
<tr>
<td>I can access internet to check for county tenders posted online and on their website.</td>
<td>2</td>
<td>2</td>
<td>10</td>
<td>16</td>
<td>27</td>
<td>43</td>
<td>4.01</td>
<td>1.098</td>
</tr>
<tr>
<td>I have IT skills which helps to easily use e-procurement</td>
<td>0</td>
<td>0</td>
<td>9</td>
<td>18</td>
<td>54</td>
<td>17</td>
<td>3.81</td>
<td>0.833</td>
</tr>
<tr>
<td>I can be able to identify and prepare prequalification document online</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>16</td>
<td>35</td>
<td>40</td>
<td>4.1</td>
<td>0.925</td>
</tr>
<tr>
<td>The county use of e-procurement have assisted PWDs to easily access government procurement opportunities without moving</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>24</td>
<td>57</td>
<td>14</td>
<td>3.82</td>
<td>0.765</td>
</tr>
</tbody>
</table>

**Table 4.6.1: Information Technology**

4.3.3 Training

Through training, individuals are able to acquire specific knowledge and skills required to undertake a given task. The study therefore sought to ascertain the effect of training on access to public procurement opportunities among PWD suppliers in Nairobi County. Table 4.6 highlights the results.

To find out whether the respondents have attended more than two trainings on business skills that also sensitized them on AGPO, the respondents were asked to respond accordingly. 30.6% of the respondents strongly agreed, 40.8% of them agreed, 2% strongly disagreed while 25.5% of the respondents were undecided. The findings were supported by a mean of 3.97 and a standard deviation of 0.89.

Moreover, respondents were asked whether the training offered covered all the necessary skills of running successful tendering services. The results showed that 26.5% of the respondents strongly agreed, 32.7% of the respondents agreed, 10.2% of them disagreed, 2% strongly disagreed while 28.6% of the respondents were neutral. The results imply that there are gaps in terms of the training offered on tendering services since a significant number of the respondents were undecided. The item had a mean of 3.71 and a standard deviation of 1.04.
Furthermore, 37.8% of the respondents strongly agreed that the county provides special training for PWDs on how to access procurement opportunities, 18.4% of them agreed, 3.1% disagreed while 40.8% of them were not sure if the county provides special training for PWD on how to access procurement opportunities. The results summed up to a mean of 3.91 and a standard deviation of 0.95.

In addition, 34.7% of the respondents strongly agreed that the training syllabus offered on procurement are adequate to assist them know how to do prequalification, 46.9% agreed while 16.3% of them were undecided. The implication is that the training syllabus offered on procurement is adequate to assist the respondents in doing prequalification. The mean for the item was 4.14 and the standard deviation was 0.76.

Finally, 35.7% of the respondents strongly agreed that training has made it easier to search for and apply for county tenders, 53.1% of them agreed while 10.2% of the respondents were undecided. The results were supported by a mean of 4.22 and a standard deviation of 0.71.

Overall, the findings on training had an aggregate mean of 3.77 and a standard deviation of 0.53. The results suggest that the respondents were not entirely in agreement with the items on training.

However, these findings are similar with what was done by Gitare and Shale (2014) who study on challenges affecting the implementation of access to the government procurement opportunities for youth, women and persons with disabilities in Kenya. A case of Nairobi County, the study found out that the legal framework has a duty to facilitate in the implementation of access to government procurement opportunities for youth, women & persons with disabilities in Kenya. The study also concluded that good training for practitioners in procurement will raise the skills of the procurement staff and to familiarize suppliers with the requirement of the reformed system.

### Table 4.7.1: Training

<table>
<thead>
<tr>
<th>We have attended more than two trainings on business skills that also sensitized us on AGPO.</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freq.</td>
<td>2</td>
<td>1</td>
<td>25</td>
<td>40</td>
<td>30</td>
<td>3.97</td>
<td>0.89</td>
</tr>
<tr>
<td>%</td>
<td>2</td>
<td>1</td>
<td>25.5</td>
<td>40.8</td>
<td>30.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The training offered covered all the necessary skills of running successful tendering services</td>
<td>Freq.</td>
<td>2</td>
<td>10</td>
<td>28</td>
<td>32</td>
<td>26</td>
<td>3.71</td>
</tr>
<tr>
<td>%</td>
<td>2</td>
<td>10.2</td>
<td>28.6</td>
<td>32.7</td>
<td>26.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The county provide special training for PWDs on how to access procurement opportunities</td>
<td>Freq.</td>
<td>0</td>
<td>3</td>
<td>40</td>
<td>18</td>
<td>37</td>
<td>3.91</td>
</tr>
<tr>
<td>%</td>
<td>0</td>
<td>3.1</td>
<td>40.8</td>
<td>18.4</td>
<td>37.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training syllabus offered on procurement are adequate to assist me know how to do prequalification.</td>
<td>Freq.</td>
<td>0</td>
<td>2</td>
<td>16</td>
<td>46</td>
<td>34</td>
<td>4.14</td>
</tr>
<tr>
<td>%</td>
<td>0</td>
<td>2</td>
<td>16.3</td>
<td>46.9</td>
<td>34.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Due to training I have received I have no problem searching and applying for county tenders</td>
<td>Freq.</td>
<td>1</td>
<td>0</td>
<td>10</td>
<td>52</td>
<td>35</td>
<td>4.22</td>
</tr>
<tr>
<td>%</td>
<td>1</td>
<td>0</td>
<td>10.2</td>
<td>53.1</td>
<td>35.7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Training** 3.77 0.53

### 4.3.4 Procurement experience

In this section of the analysis, the study highlights the results on procurement experience. Basing on the findings in table 4.7, 34.7% of the respondents agreed that they have done public tendering activities for many years, 56.1% of them agreed while 8.2% of them strongly disagreed. The item realized a mean of 4.09 and a standard deviation of 1.05, implying that the respondents in question have done public tendering activities for many years.

To establish whether the respondents have adequate experience in searching for public tenders, respondents were requested for their opinion and the results were such that, 31.6% of the respondents strongly agreed, 25.5% of them agreed, 8.2% of them disagreed, 17.3% strongly disagreed while 17.3% of the respondents were neutral. The results summed up to a mean of 3.46 and standard deviation of 1.45. The results indicated that the respondents are yet to have adequate experience in searching for public tenders.
To ascertain if the respondents are aware of how to successfully apply for government tenders, results revealed that, 28.6% of them strongly agreed that they are aware of how to apply for government tenders, 20.4% of them agreed, 14.3% of them disagreed, 7.1% of them strongly disagreed and 29.6% of the respondents were neutral. This summed up to a mean of 3.49 and standard deviation of 1.25. The results suggest that a significant portion of the respondents are unaware of how to successfully apply for government tenders.

When asked if they have friends well experienced in government procedure experience, 24.5% of the respondents strongly agreed, 29.6% of them agreed, while 40.8% of them were undecided. The item realized a mean of 3.73 and a standard deviation of 0.89 implying that certain respondents have friends that are well experienced in government procurement experience.

Finally, 38.8% of the respondents strongly agreed that they have adequate experience in preparing government procurement documents, 39.8% of them agreed while 19.4% of the respondents were not sure if they have adequate experience in preparing government procurement documents. The item had a mean of 4.13 and a standard deviation of 0.87.

Generally, the findings on procurement experience summed up to a mean of 3.78 and a standard deviation of 0.65 suggesting that the respondents were not entirely in agreement with the items on procurement experience.

### Table 4.8.1: Procurement experience

<table>
<thead>
<tr>
<th></th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have done public tendering activities for many years</td>
<td>Freq.</td>
<td>8</td>
<td>0</td>
<td>1</td>
<td>55</td>
<td>34</td>
<td>4.09</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>8.2</td>
<td>0</td>
<td>1</td>
<td>56.1</td>
<td>34.7</td>
<td></td>
</tr>
<tr>
<td>I have adequate experience in searching for public tenders</td>
<td>Freq.</td>
<td>17</td>
<td>8</td>
<td>17</td>
<td>25</td>
<td>31</td>
<td>3.46</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>17.3</td>
<td>8.2</td>
<td>17.3</td>
<td>25.5</td>
<td>31.6</td>
<td></td>
</tr>
<tr>
<td>Am very aware on how to successfully apply for government tenders</td>
<td>Freq.</td>
<td>7</td>
<td>14</td>
<td>29</td>
<td>20</td>
<td>28</td>
<td>3.49</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>7.1</td>
<td>14.3</td>
<td>29.6</td>
<td>20.4</td>
<td>28.6</td>
<td></td>
</tr>
<tr>
<td>I have friends well experienced in government procurement experience</td>
<td>Freq.</td>
<td>0</td>
<td>5</td>
<td>40</td>
<td>29</td>
<td>24</td>
<td>3.73</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>0</td>
<td>5.1</td>
<td>40.8</td>
<td>29.6</td>
<td>24.5</td>
<td></td>
</tr>
<tr>
<td>I have adequate experience in preparing government procurement documents</td>
<td>Freq.</td>
<td>2</td>
<td>0</td>
<td>19</td>
<td>39</td>
<td>38</td>
<td>4.13</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>2</td>
<td>0</td>
<td>19.4</td>
<td>39.8</td>
<td>38.8</td>
<td></td>
</tr>
</tbody>
</table>

**Procurement experience**

<p>| | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>3.78</strong></td>
<td><strong>0.65</strong></td>
</tr>
</tbody>
</table>

### 4.3.5 Access to PPO

This section of the analysis highlights the findings on access to public procurement opportunities among PWDs suppliers in Nairobi County. Basing on the results in table 4.8, 51% of the respondents agreed that they have been awarded several tenders by the county government, 21.4% strongly agreed though 6.1% disagreed and 19.4% were not sure. The item realized a mean of 3.84 and a standard deviation of 0.91. Generally, most of the respondents have been awarded tenders by the county government.

As well, 25.5% of the respondents strongly agreed that the county frequently qualify their tender prequalification, 39.8% agreed, 3.1% disagreed while 29.6% of the respondents were undecided. Overall, the county frequently qualifies the respondent’s tender prequalification. The results summed up to a mean of 3.84 and a standard deviation of 0.92.

To find out if the respondents have never been denied any public tender by the county government, the respondents were asked for their views on this and the results showed that 19.4% of the respondents strongly agreed, 48% of them agreed, 3.1% of them disagreed while 29.6% of the respondents were neutral. The item realized a mean of 3.84 and a standard deviation of 0.77.

Furthermore, 38.8% of the respondents strongly agreed that they have no problem in accessing county government procurement opportunities, 43.9% agreed, 4.1% strongly disagreed while 13.3% were undecided. The findings are supported by a mean of 4.17 and standard deviation of 0.81.
Finally, 33.7% of the respondents strongly agreed that the county government does not PWD them in awarding tenders, 43.9% agreed while 22.4% of them were not sure. The item realized a mean of 4.11 and a standard deviation of 0.75.

In general, the results on access to public procurement opportunities had an aggregate mean of 4.09 and a standard deviation of 0.68.

Table 4.9.1 Access to PPO

<table>
<thead>
<tr>
<th></th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have been awarded several tenders by the county government</td>
<td>Freq. 2</td>
<td>6</td>
<td>19</td>
<td>50</td>
<td>21</td>
<td>3.84</td>
</tr>
<tr>
<td>The county frequently qualify my tender prequalification</td>
<td>Freq. 2</td>
<td>3</td>
<td>29</td>
<td>39</td>
<td>25</td>
<td>3.84</td>
</tr>
<tr>
<td>I have never been denied any public tender by the county government</td>
<td>Freq. 0</td>
<td>3</td>
<td>29</td>
<td>47</td>
<td>19</td>
<td>3.84</td>
</tr>
<tr>
<td>I have no problem in accessing county government procurement opportunities</td>
<td>Freq. 4</td>
<td>0</td>
<td>13</td>
<td>43</td>
<td>38</td>
<td>4.17</td>
</tr>
<tr>
<td>County government do not PWDs me in awarding tenders</td>
<td>Freq. 0</td>
<td>0</td>
<td>22</td>
<td>43</td>
<td>33</td>
<td>4.11</td>
</tr>
</tbody>
</table>

Access to PPO  
4.09  0.68

4.4 Inferential Analysis

4.4.1 Correlation Results

The study used Pearson Product Moment correlation analysis to assess the nature of the relationship between the independent variables and the dependent variable as well as the relationships among the independent variables (Wong & Hiew, 2005; Jahangir & Begum, 2008). Wong and Hiew (2005) further posit that the correlation coefficient value ($r$) ranging from 0.10 to 0.29 is considered weak; from 0.30 to 0.49 is considered medium, and from 0.50 to 1.0 is considered strong. There was a strong relationship between financial resource and access to PPO ($r = 0.681$, $p$-value < .01). Also, the study exhibited a strong relationship between information technology and access to PPO ($r = 0.600$, $p$-value < .01). Similarly, a strong relationship was exhibited between training and access to PPO ($r = 0.535$, $p$-value < .01). Finally, there was a strong relationship between procurement experience and access to PPO ($r = 0.562$, $p$-value < .01). (See Table 4.9).

Table 4.10.1: Correlation

<table>
<thead>
<tr>
<th>Access to PPO</th>
<th>Financial Resource</th>
<th>Information Technology</th>
<th>Training</th>
<th>Procurement experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson</td>
<td>Correlation</td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Resource</td>
<td>Pearson</td>
<td>Correlation</td>
<td>.681**</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information Technology</td>
<td>Pearson</td>
<td>Correlation</td>
<td>.600**</td>
<td>0.550**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training</td>
<td>Pearson</td>
<td>Correlation</td>
<td>.535**</td>
<td>.650**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procurement experience</td>
<td>Pearson</td>
<td>Correlation</td>
<td>.562**</td>
<td>.419**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed).
4.11 Regression results

4.4.1.2 Model Summary

Table 4.10 illustrates the model summary of multiple regression model, the results showed that all the four predictors (financial resources, information technology, training and procurement experience) explained 60.9 percent variation of access to PPO (R squared =0.609).

<table>
<thead>
<tr>
<th></th>
<th>R</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.780a</td>
<td>0.609</td>
<td>0.592</td>
</tr>
</tbody>
</table>

4.4.1.3 ANOVA

Study findings in table 4.11 indicated that the above discussed coefficient of determination was significant as evidence of F ratio of 36.166 with p value 0.000 <0.05 (level of significance). Thus, the model was fit to predict access to PPO using financial resources, information technology, training and procurement experience.

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>35.746</td>
<td>4</td>
<td>8.936</td>
<td>36.166</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>22.98</td>
<td>93</td>
<td>0.247</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>58.726</td>
<td>97</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Dependent Variable: Access to PPO
b Predictors: (Constant), Procurement experience, Training, Information Technology, Financial Resource

4.4.1.4 Coefficients of Estimate

The first objective of the study sought to find out the influence of financial resources on access to public procurement opportunities among PWDs suppliers in Nairobi County. Research findings confirmed that financial resources have a significant effect on access to PPO basing on $\beta_1= 0.322$ (p-value = 0.001 which is less than $\alpha = 0.05$) implying that financial resources have a significant effect on access to PPO. Furthermore, the effect of financial resource was stated by the t-test value = 3.309 which implies that the standard error associated with the parameter is more than the effect of the parameter. Consistent with the results, Nduta, Ayuma, Langat, and Yego (2015) established that there is a correlation between youth participation in public procurement and finances. As well, in a study by McCrudden (2007) it was established that the public works in USA provided at least 10% of each grant to minority business enterprises. Further support to the study findings is by Kilonzo, (2012) who noted that provision of financial capital may be an important predictor of the performance of youth owned enterprises. Further support to the study results is by Lagat, Namusonge and Berut, (2016) who established that availability of financial resources, contributes to accessing procurement opportunities in Trans nzoia County Government.

The second objective of the study sought to assess effect of information technology on access to public procurement opportunities among PWDs suppliers in Nairobi County. Findings showed that information technology had coefficients of estimate which was significant basing on $\beta_2= 0.21$ (p-value = 0.012 which is less than $\alpha = 0.05$) hence we conclude that information technology has a significant influence on access to PPO. This implies that for each unit increase in information technology, there is up to 0.012 unit increase in access to PPO. Also, the effect of information technology is shown by the t-test value of 3.309 which implies that the effect of information technology surpasses that of the error. The findings are in concurrence with Murray, (2007) who elucidated that improvement in information access has the ability to enhance trade prospects of PWDs by making them more acceptable vendors to global business partners. In a similar vein, Osman (2015) agreed that ICT performs an important function in the lives of persons with disabilities despite them having a challenge accessing ICT services.

The third objective of the study sought to ascertain effect of training on access to public procurement opportunities among PWDs suppliers in Nairobi County. Study findings showed that training had coefficients of estimate which was significant basing on $\beta_3 = 0.075$ (p-value = 0.034 which is less than $\alpha = 0.05$) hence training has a significant effect on access to
PPO. This indicates that for each unit increase in training, there is up to 0.075 units increase in access to PPO. The effect of training is stated by the t-test value = 2.15 which point out that the effect of training is over 5 times that of the error associated with it. In conformity with the results, Waltermeyer (2003) established that the inherent level of education and skills affected the procurement systems.

Finally, findings showed that procurement experience had coefficients of estimate which was significant basing on $\beta_4 = 0.292$ (p-value = 0.000 which is less than $\alpha = 0.05$). This suggests that there is up to 0.292 unit increase in access to PPO for each unit increase in procurement experience. The effect of procurement experience is thrice the effect attributed to the error, this is indicated by the t-test value = 3.818. In line with the findings, Weterings & Koster, (2007) noted that experience of managers and the knowledge they accumulate during their careers serves as an important input factor of a firm.

<table>
<thead>
<tr>
<th>Table 4.12 Coefficients of Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unstandardized Coefficients</strong></td>
</tr>
<tr>
<td><strong>B</strong></td>
</tr>
<tr>
<td>Constant</td>
</tr>
<tr>
<td>Financial Resource</td>
</tr>
<tr>
<td>Information Technology</td>
</tr>
<tr>
<td>Training</td>
</tr>
<tr>
<td>Procurement experience</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Access to PPO

5. SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION

5.1 Summary of Findings

The demographic information of the respondents indicated that male individuals comprised the majority. In terms of education, it can be ascertained that they are fairly educated. The findings on business characteristics established that the firms have sufficient procurement experience though they suffer a shortage of labor. In addition, most firms have engaged in procurement with the county for a period ranging from a year to five years.

The results on financial resources indicated that the firms have access to adequate fund to conduct procurement business with the county. On the same note, it is easier for the firms to access loans to conduct procurement business. As well, the firms have high financial linkages where they can access fund for conducting procurement business with the county. However, to some firms, access to government loan such as the Uwezo fund is a challenge. Besides that, the county provides special funding criteria for PWDs.

With respect to information technology, the study established that the respondents can access internet to check for county tenders posted online and on their website. Besides, they can identify and prepare prequalification document online. As well, e-procurement has made it possible for PWDs to easily access government procurement opportunities without moving. Furthermore, to certain individuals, it is difficult to access computer for preparing tender documents. In addition, as part of the planning process the business units clearly indicated the timelines for using the required goods and services.

The findings on training indicated that the respondents have attended more than two trainings on business skills that also sensitized them on AGPO. The county also offers special training for PWD on how to access procurement opportunities. As well, the training syllabus offered on procurement is adequate to assist the respondents in doing prequalification. Similarly, training has made it easier to search for and apply for county tenders. However, there are gaps in terms of the training offered on tendering services.

Finally, the results on procurement experience have established that the respondents have vast experience in public tendering activities. Furthermore, certain respondents have friends that are well experienced in government procurement experience. Also, they have adequate experience in preparing government procurement documents. However, the respondents are yet to have adequate experience in searching for public tenders. Likewise, a significant portion of the respondents are unaware of how to successfully apply for government tenders.
5.2 Conclusion

Financial resource is a crucial ingredient towards the participation of PWDs in public procurement opportunities. Not only does it encourage entrepreneurship but it also provides adequate funds to conduct procurement business. In most instances, PWDs are unable to get loans from banks because of lack of security. However, the financial linkages have made it easier for the firms to access loans. The challenge though is that the access to government loans is an uphill task especially the Uwezo fund. Despite this, the county government has a special funding criterion which has come in handy for PWDs. Consequently, the financial liquidity for PWDs has improved thereby facilitating further their access to PPO.

The study has indicated that information technology improves the efficiency of PWDs suppliers as they compete for public procurement opportunities. Through information technology, PWDs can access county tenders posted online as well as prepare prequalification documents. Consequently, PWDs can access government procurement opportunities without moving which puts them at par with other competitors eying for similar opportunities.

Furthermore, the study has revealed that training has an influence on the access of public procurement opportunities by PWDs. Precisely, improved training was found to increase access to PPO. While on the other hand, insufficient knowledge makes it difficult for suppliers to successfully participate in PP. The advantage is that there is special training for PWDs on how to access procurement opportunities. As well, through training individuals are able to search for as well as apply for tenders. They can also do prequalification which implies that PWDs are adequately trained on procurement opportunities.

Finally, procurement experience has a positive influence on the access to public procurement opportunities for PWDs. As such, having adequate experience in public tendering is an added advantage for PWDs. Other than that, also friends with experience in procurement is beneficial to PWDs as it increases their chance of winning tenders. There are however gaps in terms of experience in searching for tenders and the best way to successfully apply for government tenders.

5.3 Recommendations

Evidently, financial resource is key to access to public procurement opportunities among PWDs suppliers. Therefore, there is need for firms with PWDs to have high financial linkages to make it easier for them to access funds for conducting procurement business. Furthermore, the government needs to direct their efforts towards making government loans such as the Uwezo fund more accessible to PWDs. As well, the special funding criteria for PWDs at the county government needs to be promoted further to access more individuals that fall under this bracket.

In addition, information technology is key in empowering PWDs in that they can access tenders online without even moving. Training of PWDs in ICT proficiency is therefore utmost necessary to enhance their access to public procurement opportunities. To further facilitate their access to procurement opportunities, their access to computers for preparing tender documents needs to be made easier. In so doing, access to public procurement opportunities for PWDs will be increased.

Since training improves access of public procurement opportunities by PWDs, it is important that people with disabilities to attend at least more than two trainings on business skills that will also be key on sensitizing them on AGPO. Also, the county has a role to play in terms of offering special training for PWDs on how to access procurement opportunities. There should also be more training on tendering services specifically on how to search and apply for county tenders.

Regarding procurement experience, both the county government and national government need to offer more opportunities in public tendering for people with disabilities so that they can acquire sufficient procurement experience. Further, PWDs need to be sensitized on how to search for tenders and prepare government procurement documents. With the above taken into consideration procurement experience will be improved.

5.4 Further Research Recommendations

This study is not without limitations. For instance, the generalizability of this study’s findings may be limited to PWDs suppliers within Nairobi County. Thus, future research should attempt to gather information from PWDs suppliers countrywide to establish if the results of the study hold.

Also, it would be interesting if future study could establish if access to procurement opportunities by PWDs has had any effect on procurement performance at the county level. Finally, future scholars need to work more in depth to establish other factors that are significant contributors to the access of procurement opportunities by PWDs.
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